

CLAIMS

1. A female condom, comprising:
a tubular pouch of resilient membranous material having an open end and a closed end;
an external biasing member connected to said pouch and providing a resilient bias to expand said open end for retaining, in use, said open end external of a vaginal canal;
and
an internal biasing member connected to said tubular pouch and providing a resilient bias serving, in use, to expand an intermediate section of said pouch outwardly against a distal portion of a woman's introitus;
said tubular pouch including a distal portion extending between the intermediate section and the closed end, and a proximal portion extending between the open end and the internal biasing member, said internal biasing member being configured and positioned relative to said outer biasing member such that the inner biasing member is, when the condom is installed within a woman's vagina, pushed distally by the introitus to create a force pulling against the outer biasing member, to thereby tent the proximal pouch portion against the introitus.
2. The female condom of claim 1, wherein an untensioned spacing between the internal and external biasing members is in the range of 3.75 – 5.0.
3. The female condom of claim 4, wherein said untensioned spacing is approximately 4.25.
4. The female condom of claim 1, wherein the internal biasing member comprises a first ring extending circumferentially about said intermediate section of said pouch.
5. The female condom of claim 4, wherein the ring is a circular ring.
6. The female condom of claim 5, wherein an untensioned spacing between the internal and external biasing members is in the range of 3.75 – 5.0.
7. The female condom of claim 6, wherein said untensioned spacing is approximately 4.25.
8. The female condom of claim 5, wherein the ring has an inner diameter in the range of 1.5 – 3.

9. The female condom of claim 4, wherein the external biasing member comprises a second ring, and said first ring is generally concentric with said second ring with respect to a longitudinal axis of the condom.

10. The female condom of claim 9, wherein an untensioned spacing between the first and second rings is in the range of 3.75 – 5.0.

11. The female condom of claim 10, wherein said untensioned spacing is approximately 4.25.

12. The female condom of claim 1, wherein the proximal portion of the tubular pouch is pre-formed in the general shape of an hour-glass.

13. The female condom of claim 1, wherein the internal biasing member comprises a plurality of stay members extending longitudinally along said distal pouch portion and having ends positioned adjacent said intermediate section.

14. The female condom of claim 1, wherein the proximal pouch portion includes a resilient framework extending along said proximal pouch portion between said external and internal biasing members.

15. The female condom of claim 14, wherein the framework includes a plurality of elements extending longitudinally along the proximal pouch portion.

16. The female condom of claim 14, wherein the framework includes an element extending helically along the proximal pouch portion.

17. The female condom of claim 1, wherein the internal biasing member forms an outwardly facing recess extending circumferentially at least partially around said intermediate section of said pouch.

18. The female condom of claim 17, wherein said internal biasing member comprises a pair of rings connected to each other, said recess being formed between said rings.

19. The female condom of claim 18, wherein the internal biasing member comprises a ring, said recess being formed in said ring.

20. The female condom of claim 19, wherein said recess is formed as an outwardly facing concave surface of said ring.

21. The female condom of claim 1, wherein the internal biasing member comprises a generally U- or V-shaped elastic stay that can be tilted upwardly, following insertion into said vaginal canal, to lodge behind the wearer's pubic bone.

22. The female condom of claim 1, wherein the internal biasing member comprises at least one pad of resilient material extending circumferentially at least partially around said intermediate section of said pouch.

23. The female condom of claim 22, wherein said resilient material comprises a foamed material.

24. The female condom of claim 23, wherein said foamed material is a hydrophilic foamed material.

25. The female condom of claim 23, wherein said foamed material comprises foamed polyurethane.

26. The female condom of claim 4, wherein said first ring has a generally oval shape.

27. The female condom of claim 26, wherein an aspect ratio of said generally oval shape is approximately 3:1.

28. The female condom of claim 26, wherein said generally oval shape has an indentation at one end thereof, for avoiding contact with a urethral opening of a wearer.

29. The female condom of claim 1, wherein the internal biasing member comprises a ring which is bent over upon itself to form a resilient framework comprising a pair of generally U-shaped members.

30. The female condom of claim 1, wherein said external biasing member comprises a second ring which forms a contoured outer perimeter of a shield-forming portion of said female condom.

31. A method of maintaining a female condom within a vaginal canal of a woman, the female condom including a tubular pouch of resilient membranous material having an open end and a closed end, an external biasing member, and an internal biasing member, said method comprising the steps of:

inserting a portion of the female condom, including the internal biasing member, into the vaginal canal; and

permitting the internal biasing member to expand an intermediate section of the condom positioned within the vaginal canal at a distal portion of the woman's introitus, and the woman's introitus to exert inward compressive forces on a proximal portion of the tubular pouch extending between the open end and the intermediate section, such that said proximal portion pulls proximally on the internal biasing member while the introitus presses distally

against the internal biasing member, whereby the proximal portion is tented against the introitus.

32. A method according to claim 31, wherein said inserting is carried out by inserting a tubular inserter device into the vaginal canal to place a distal end of the device proximal the distal portion of the introitus, advancing a plunger of the device within an outer housing of the device to cause the internal biasing member to exit the device from said distal end, and withdrawing the device away from the vaginal opening with said internal biasing member retained by the introitus.

33. A female condom retained within a vaginal canal of a woman, comprising:

a tubular pouch of resilient membranous material including an open end and a closed end;

an external biasing member mounted to said pouch and providing a resilient bias to expand said open end for retaining said open end external of the vaginal canal; and

an internal biasing member mounted to said tubular pouch and providing a resilient bias serving to expand an intermediate section of said pouch outwardly against a distal portion of the woman's introitus;

said tubular pouch including a distal portion extending between the intermediate section and the closed end, and a proximal portion extending between the open end and the intermediate section, said internal biasing member being configured and positioned relative to said outer biasing member, and said introitus, such that said introitus exerts inward compressive forces on said proximal portion causing said proximal portion to pull proximally on the internal biasing member while the introitus presses distally against the internal biasing member, thereby tenting the proximal portion against the introitus.

34. An assembly for preplacing a female condom within a vaginal canal of a woman, said assembly comprising:

an inserter device including a tubular housing and a plunger member advanceable within said housing; and

a female condom carried within said tubular housing in a collapsed condition such that upon advancement of said plunger member at least a portion of said female condom

is pushed out of said tubular housing by said plunger member and permitted to expand from said collapsed condition.

35. The assembly of claim 34, wherein a proximal portion of said female condom extends within said plunger member.

36. The assembly of claim 35, wherein said plunger member comprises a ledge serving to push a distal portion of said female condom out of said tubular housing as said plunger member is advanced within said tubular housing, said ledge permitting said proximal portion of said tubular pouch to pass thereby and out of said tubular housing after said distal portion has been pushed out of said tubular housing.

37. The assembly of claim 34, wherein said female condom comprises a tubular pouch and a first pouch biasing member, and said advancement of the plunger member pushes a distal portion of said tubular pouch, and said first pouch biasing member, out of a distal end of said tubular housing.

38. The assembly of claim 37, wherein a proximal portion of said tubular pouch extends within said plunger member.

39. The assembly of claim 38, wherein said plunger member comprises a ledge serving to push said first pouch biasing member out of said tubular housing as said plunger member is advanced within said tubular housing, said ledge permitting said proximal portion of said tubular pouch to pass thereby and out of said tubular housing after said first pouch biasing member has been pushed out of said tubular housing.

40. The assembly of claim 39, wherein said female condom further comprises a second pouch biasing member connected to said proximal portion.

41. A method of adjusting the size of a female condom, said condom including a tubular pouch of resilient membranous material having an open end and a closed end, an

external biasing member connected to said tubular pouch adjacent said open end thereof, and an internal biasing member connected to said tubular pouch distally of said external biasing member, said method comprising adjusting a spacing between said external biasing member and said internal biasing member, by rolling said resilient membranous material upon one of said external biasing member and said internal biasing member.

42. A method according to claim 41, wherein said one of said external biasing member and said internal biasing member comprises a ring, and said rolling is carried out by turning said ring inside out (180°) at least once.